

REMARKS

Claims 1-41 are pending and at issue in this patent application. Of these, claims 1 and 31 are independent. Claims 40 and 41 are added by this amendment. Applicants respectfully request reconsideration and favorable action in this case.

Claims 1 and 31 are amended to recite, *inter alia*, an operator performance assessment being a score assessing the ability of the operator to operate the vehicle relative to known good practices.

Claims 5, 8, 34 and 39 are amended to correct grammar and typographical errors.

Claim 31 is amended to recite, *inter alia*, an operator performance assessment value being a score assessing the ability of the operator to operate the vehicle relative to known good practices.

New claims 40 and 41 are added to recite that known good practices comprises information on driving performance of a normal population, previous driving performance and/or habitual behavior. This is supported in the application specification at least at pages 13-14.

Applicants respectfully traverse the rejection of claims 1, 3-22, 24-39 as anticipated by Kubota et al. (U.S. Patent No. 6,249,720) and respectfully traverse the rejection of claim 2 as obvious over Kubota in view of McMillan et al. (U.S. Patent No. 5,797,134), and the rejection of claim 23 as obvious over Kubota in view of Lemelson et al. (U.S. Patent No. 6,487,500).

Each of claims 1-41 recites a method or an apparatus for assessing vehicle operator performance based, *inter alia*, on known good practices. None of the cited references discloses or teaches assessing vehicle operator performance that incorporates consideration of

known good practices. It follows that none of the cited references can anticipate the pending claims or render the pending claims obvious.

While Kubota discloses using vehicle operating data and receiving operator activity data, Kubota does not disclose determining driver performance. The Examiner cites Kubota col. 7, lines 40-56 for the proposition that recording the "study of the agent through driver's operation and/or response" using study item data 292 and response data 293 relate to the step of determining driver performance. Applicants contend that the use of the word "response" cited in the passage refers to response data 293, which contains a driver's response to questions posed by the animated agent, not a response made to driving conditions. (see Kubota col. 10, lines 13-16). While a driver's reaction ("response") to driving conditions (e.g., a turn) may be considered in determining driver performance, the word "response" as used in Kubota is strictly limited to a driver's response to questions posed by the animated character agent. (See Kubota col. 6, lines 20-21; col. 2, lines 12-22; Fig. 5, 6A and 6B) Moreover, the response options disclosed by Kubota do not relate to driver performance, only to vehicle system operation, such as air-conditioning and radio. (See Kubota col. 10, lines 27-37; Fig. 6A; col. 9, lines 60-64; col. 14 lines 22-42) Therefore, the "response" of Kubota is not indicative of driver performance.

Applicants further contend that the "driver's operation", as recorded in study item data 292, refers specifically to vehicle operating data denoting vehicle sensor values such as vehicle ignition, fuel level, vehicle speed, temperature, etc. (See Kubota Fig. 2; col. 8 line 66 - col. 9, line 3; col. 9, lines 29-63; col. 9, line 65 - col. 10 line 3; Fig 5; Fig 6A) While the vehicle operating data referred to by "driver's operation" is an input in determining driver performance, as recited by the pending claims, vehicle operating data alone does not determine driver performance. Determining driver performance requires analyzing vehicle

operating data, *inter alia*, in order to determine the task the driver is attempting to perform and then comparing the driver's actual operation of the vehicle to known good practices. For example, recording steering angle, velocity, and brake application alone cannot determine whether or not the driver made a good turn in wet driving conditions. In order to assess driver performance, the vehicle operating data must be interpreted to determine the maneuver that the driver is attempting, e.g., a 100 degree turn in wet surface conditions. The driver's actual application of steering, brake and accelerator, *inter alia*, used to accomplish the turn in wet surface conditions is then compared to the application of steering, brake and accelerator, *inter alia*, made by other good drivers, the driver's own past driving performance (good and bad) or the driver's habitual behavior (good and bad) in order to determine driving performance. Kubota does not disclose or even suggest that this analysis is performed on the driver's operating data. Therefore, Kubota does not disclose assessing vehicle operator performance.

While Kubota discloses an animated character that reacts by falling when brake pressure is applied (see Examiner's reference to Kubota col. 9 lines 8-27), Kubota does not disclose or teach assessing vehicle operator performance based on known good practices, previous driving performance or habitual behavior. Kubota teaches that the level of exaggeration of an animated agent is directly related to the amount of brake pressure applied. (See Kubota col. 9 lines 8-27). Kubota further teaches that the exaggeration of the character is adjusted from falling on "his or her behind" to taking "several steps back" to keeping "his or her foot[ing]" (See Kubota col. 9, lines 15-20), depending on the frequency of brake application. (See Kubota col. 9, lines 20-22, stating that "such program represents that the agent becomes experienced and accustomed to the driver's sudden braking operation.")

Therefore, Kubota discloses an animated agent that indicates, via a level of exaggeration, the magnitude and frequency of a driver's braking application.

The Examiner insists that the agent's gestures, such as the falling down of the animated character, is an indication of driver performance that considers known good practices. While this character gesturing indicates frequency of control application (such as braking), which may be indicative of habit, Kubota does not disclose, in any manner, that this frequency is used to assess driver performance. At best, this character gesturing provides an indication of an operational characteristic of the vehicle, much like an indicator light on a dashboard shows the angle of the steering wheel, the gear position of the transmission, or the abruptness of breaking (e.g., an Antilock Brake System light). This gesturing, however, does not indicate the quality of the driver's operation based on known good practices, may include a driver's habitual behavior, because Kubota fails to teach how the frequency of control operation is related to a measure of good or bad driving. For example, if a driver was recorded by the Kubota system to brake heavily 10 times per day (on average) and on a particular day, the driver braked heavily 15 times, Kubota teaches that the character gesturing may change to indicate this. Therefore, a driver may realize that he has been braking heavily more often than his average. Kubota does not teach, however, whether the driver's average indicates good or bad driving or whether the change from the average indicates good or bad driving. Therefore, Kubota does not teach determining driver performance.

Moreover, Kubota specifically teaches away from accepted good driving practices. A falling down gesture made when strong break pressure is applied may be interpreted as an undesired effect, when the situation, according to known good practices, requires strong breaking to avoid a collision. Assessing a departure from the average magnitude and average frequency of control application, such as applying break pressure, does not indicate, in any

manner, the quality of a driver's control of the vehicle for a given situation. Kubota's character animation, therefore, does not teach assessing vehicle operator performance based on known good practices, previous driving performance or habitual behavior.

It is clear that the prior art must make a suggestion of or provide an incentive for a claimed combination of elements to establish a prima facie case of obviousness. See, *In re Oetiker*, 24 U.S.P.Q.2d 1443, 1446 (Fed. Cir. 1992); *Ex parte Clapp*, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. 1985). This principle holds true even if the applied art could be modified to produce the invention recited by the pending claims. See, *In re Mills*, 16 U.S.P.Q.2d 1430, 1432 (Fed. Cir. 1990); *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984) ("The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.") Because Kubota does not disclose or even suggest the desirability of assessing vehicle operator performance, much less performance based on a comparison with known good practices, Kubota cannot render any of claims 1-41 obvious.

Performance is a quality measure. Kubota never discloses a quality measurement. Kubota is only concerned with providing a driver interface to the vehicle systems in order to facilitate driver control of on-board systems such as air-conditioning and radio. Kubota discloses an animated agent that provides an indicator of operational functions being executed by the driver. At best, these indicators provide information on the frequency of vehicle control usage and the force applied to the vehicle from these controls. These indicators, however, do not convey a measure of the quality of driver operation.

The method and apparatus of claims 1-41, on the other hand, assess driver performance by collecting information on vehicle operating data, operator activity data, vehicle environment data, and operator condition data, and determining driver performance

based on known good practices. While Kubota discloses sensor data that can be used to determine performance, as well as measuring frequency of operation that is indicative of habit, Kubota does not, in any manner, disclose determining driver performance based on known good practices.

While McMillan discloses collecting vehicle sensor data for determining over-speeding, observation of traffic signs and signals, road conditions, traffic conditions and vehicle position over time, McMillan does not disclose or teach assessing vehicle operator performance based, *inter alia*, on known good practices. Instead, McMillan discloses an apparatus and a method for monitoring, recording and communicating vehicle driving data for determining the insurance cost of a driver. McMillan discloses sending the collected information to a central processing center where the information is processed to determine the correct insurance cost. No determination of driver performance is made based on known good practices.

Lemelson does not disclose, in any manner, assessing driver performance.

Because none of Kubota, McMillan, or Lemelson discloses assessing vehicle operator performance based on known good practices, past driving performance, or habitual behavior, none of the cited references can anticipate pending claims 1-41 or render pending claims 1-41 obvious.

CONCLUSION

For at least the reasons set forth above, Applicants respectfully request reconsideration and allowance of rejected claims 1-41.

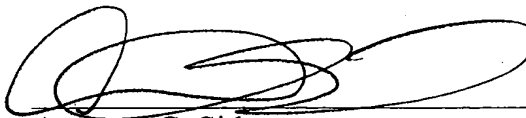
Although Applicants believe that no other fees are due, the Commissioner is hereby authorized to charge any fees or to credit any overpayments to Deposit Account No. 13-2855 of Marshall, Gerstein & Borun LLP. In addition, if a petition for an extension of time under 37 CFR 1.136(a) is necessary to maintain the pendency of this case and is not otherwise requested in this case, Applicants request that the Commissioner consider this paper to be a request for an appropriate extension of time and hereby authorize the Commissioner to charge the fee as set forth in 37 CFR 1.17(a) corresponding to the needed extension of time to Deposit Account No. No. 13-2855 of Marshall, Gerstein & Borun LLP.

If there are matters that can be discussed by telephone to further the prosecution of this application, Applicants respectfully request that the Examiner call its attorney at the number listed below.

Respectfully submitted,

MARSHALL, GERSTEIN & BORUN LLP
6300 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606
312-474-6300

By:



Anthony G. Sitko
Registration No. 36,278
Attorney for Applicants

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